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8

UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF CALIFORNIA
SAN FRANCISCO DIVISION

11 3COM CORPORATION,

12 Plaintiff,

13 v.

14 D-LINK SYSTEMS, INC.

15 and

16 REALTEK SEMICONDUCTOR CORP.,

17 Defendants.

Case No. CV-03-2177-VRW ENE

**REALTEK'S NOTICE OF MOTION AND
MOTION FOR SUMMARY JUDGMENT
OF INVALIDITY OF U.S. PATENTS NO.
5,434,872 AND NO. 5,732,094**

Judge: Vaughn R. Walker
Date: December 20, 2007
Time: 9:00 a.m.
Courtroom: 6, 17th Floor

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1 **NOTICE OF MOTION AND MOTION**

2 TO PLAINTIFF AND ITS ATTORNEYS OF RECORD:

3 PLEASE TAKE NOTICE that on December 20, 2007 at 9:00 a.m. in Courtroom 6 of this Court
 4 located at 450 Golden Gate Avenue, San Francisco, California, or as soon thereafter as the matter may
 5 be heard, Defendant Realtek Semiconductor Corporation (“Realtek”) will and hereby does move this
 6 Court, pursuant to Rule 56 of the Federal Rules of Civil Procedure, for summary judgment that claims
 7 1, 10 and 21 of United States Patent No. 5,434,872 (“the ’872 Patent”) and claims 1, 19, 21, 28, 39 and
 8 47 of U.S. Patent No. 5,732,094 (“the ’094 patent”) are invalid.

9 As basis for this motion, as set forth more fully in the Memorandum of Points and Authorities
 10 below, Realtek states that every element of these claims was first invented in this country by Farzin
 11 Firoozmand, as reflected in his U.S. Patent No. 5,210,749 (“the ’749 patent” or “Firoozmand I”) and
 12 No. 5,488,724 (“the ’724 patent” or “Firoozmand II”). Those patents were conceived of and the
 13 applications filed before the conception by the inventions of the ’872 and ’094 patents and they are
 14 therefore prior art. Realtek also states that the claimed inventions were offered for sale in the United
 15 States more than one year before the application for the ’872 and ’094 patents was filed, rendering
 16 those patents invalid. To the extent claims 21 of the ’872 patent and 28 of the ’094 patent are not
 17 anticipated, they are invalid as obvious.

18 This motion is based upon this Notice of Motion and Memorandum of Points and Authorities,
 19 the supporting declarations of Farzin Firoozmand (“Firoozmand Decl.”) and S.H. Michael Kim (“Kim
 20 Decl.”) filed herewith, the other papers and pleadings on file and on such other argument and evidence
 21 as may be presented to the Court at or prior to the hearing on this motion.

22 **MEMORANDUM OF POINTS AND AUTHORITIES**

23 **I. INTRODUCTION**

24 3Com accuses Realtek of infringing several claims in each of its ’872 and ’094 patents. Those
 25 patents relate to a network adapter that will begin the transmission of a frame or packet of data over a
 26 network medium before the network adapter receives all of the data for the packet. This “early
 27 transmit” function is intended to increase the speed at which data can be transferred by eliminating
 28 delays. 3Com cannot prevail on these allegations for the simple reason that these patent claims are

1 invalid. 3Com was not the first to invent the improved network adapters as claimed in these patents.
 2 Rather, Farzin Firoozmand at Advanced Micro Devices Corp. beat them to the punch by at least a year.
 3 Mr. Firoozmand's network adapter design for AMD's SUPERNET 2 Chip Set product included every
 4 element of the 3Com patent claims. That design was reduced to practice in a chip that was tested and
 5 found to be functional more than two years before 3Com filed its patent applications. Samples of those
 6 chips were provided to AMD customers more than two years before 3Com filed its patent applications.
 7 AMD began commercial sales of the network adapter chips more than one year before 3Com filed its
 8 patents. For all of these reasons, 3Com's patent claims are invalid, and Realtek is entitled to summary
 9 judgment.

10 **II. STATEMENT OF FACTS**

11 **A. The '872 and '094 Patents**

12 The application for the '872 patent was filed on July 21, 1992. The '094 patent issued from a
 13 continuation application related to the application for the '872 patent and claims the same priority date.
 14 The two patents share the same written description. The '872 and '094 patents disclose and claim
 15 alleged improvements to network interface adapters, often called network interface cards or "NICs."
 16 In particular, the patents state that NICs will download a frame or packet of data from the host and,
 17 after all of the data bytes of the frame are in memory in the NIC, begin to transmit that packet onto the
 18 communication medium. The '872 and '094 patents state that this process results in lower data
 19 throughput. '872 at 1:50-57. The '872 and '094 patents purport to increase that throughput by starting
 20 the transmission of packet data to the network before all of the packet data has been received into the
 21 buffer memory. *Id.* at 2:7-21. A counter coupled to the buffer memory monitors packet data
 22 transferred into the buffer and, once a sufficient threshold amount of data is received, the NIC initiates
 23 the early transmission of the packet while still receiving the remaining data. *Id.* The patents also
 24 discuss problems that could be encountered with this early transmission and ways to mitigate those
 25 problems. First, if the threshold is set too low, data transferred out of the buffer may outpace data
 26 transferred in. Such an "underrun" condition would cause an incomplete frame to be transmitted onto
 27 the network. The patents discuss reporting such underrun conditions and using that data to optimize the
 28

1 threshold value. In addition, the patents disclose transmitting a “bad frame” indication when an
 2 incomplete frame is transmitted.

3 **B. The Firoozmand Patents**

4 On May 29, 1990 Farzin Firoozmand filed several patent applications relating to NICs.
 5 Firoozmand Decl., ¶ 9. Two patents of particular interest here issued from those applications: U.S.
 6 Patent 5,210,749 (“the ‘749 patent” or “Firoozmand I”) and U.S. Patent 5,488,724 (“the ‘724 patent”
 7 or “Firoozmand II”). *Id.*, Exs. 2 and 3. Mr. Firoozmand was an engineer with Advanced Micro
 8 Devices Corp. (“AMD”) between 1985 and 1989. *Id.*, ¶ 8. He was responsible for the project that led
 9 to AMD’s commercial introduction of its Supernet II NIC product. *Id.* ¶¶ 2-4. Mr. Firoozmand
 10 provided an invention disclosure statement to AMD’s patent counsel on May 15, 1989, which began
 11 the process of preparing applications for those patents. *Id.*, ¶ 11.

12 As disclosed in the patents, Mr. Firoozmand’s NIC included a controller chip called the
 13 FORMAC Plus. Firoozmand Decl., ¶ 5. That chip used a buffer 126 memory for storing data
 14 temporarily as it was received from or transferred to the network. *Id.*, ¶ 8. Mr. Firoozmand’s patents
 15 disclose that the FORMAC Plus will initiate the transfer of data out of the buffer memory to the
 16 network before an entire frame is received. *Id.*, ¶ 8-9. That early transmission will begin when the
 17 amount of data in the buffer memory exceeds a threshold value stored in an alterable memory location.
 18 *Id.*, ¶ 8-9. Mr. Firoozmand’s design also included the reporting of underrun conditions, optimizing the
 19 threshold value and transmitting bad frame data. *Id.*, ¶ 10-11.

20 **C. The Commercial AMD SUPERNET 2 Products**

21 The NIC circuitry disclosed in the Firoozmand I and II patents was implemented in a
 22 commercial product sold by AMD as the SUPERNET 2 chipset. Firoozmand Decl., ¶ 14. As disclosed
 23 in the AMD Data Sheets published in 1991, the SUPERNET 2 chipset consisted of the FORMAC Plus
 24 controller chip, a physical layer controller and physical data transmit/receiver chips. *Id.*, Ex. 8 at
 25 RT00839. Just as described in the Firoozmand I and II patents, the FORMAC Plus chip includes a
 26 buffer memory, a counter to determine the amount of data transferred to the buffer memory, and an
 27 alterable storage location to store a threshold value. *Id.*, ¶ 17-18. In operation, the count of data
 28 received by the buffer is compared to the threshold value stored in the register and, when a threshold

1 amount of data has been received, the transmission of the patent is initiated. *Id.*, ¶ 18. *Id.*, ¶ 17. The
 2 threshold value is alterable by the host and could be used to optimize the threshold based on the system
 3 operation. *Id.*, ¶ 10. Underrun conditions were detected and reported to the hosts allowing the
 4 optimization of the threshold. *Id.*, ¶ 11. In an underrun condition FORMAC Plus would send a bad
 5 frame signal. *Id.*, ¶ 12. As discussed in more detail below, the FORMAC Plus included in every
 6 element of the asserted patent claims.

7 AMD began providing samples of that chip to its customers for testing by the summer of 1990.
 8 Firoozmand Decl., Ex. 10. The SUPERNET 2 chipset was offered for sale in February 1991. That
 9 month's issue of LAN: Local Area Network Magazine reported AMD's announcement of the
 10 commercial availability of the SUPERNET 2 chipset, including the FORMAC Plus chip. That article
 11 states that AMD was offering to sell the SUPERNET 2 at a price of \$225.00 in lots of one thousand. In
 12 AMD's own magazine distributed to its customers, AMD repeated the same offer. *Id.*, Ex. 11 (AMD
 13 00573). A card dated June 3, 1991 invites readers to request "free technical material" about the
 14 SUPERNET 2 product. *Id.*, AMD 00573-00574.

15 **III. ARGUMENT**

16 **A. Legal Standard**

17 Summary judgment may be appropriate when no genuine dispute of material fact exists. *Ideto*
Access, Inc. v. Echostar Satellite Corp., 383 F.3d 1295, 1299 (Fed. Cir. 2004), quoting *Bai v. L & L*
Wings, Inc., 160 F.3d 1350, 1353 (Fed. Cir. 1998). Once one party moves for summary judgment and
 19 supports its motion with admissible evidence, the non-moving party must set forth specific facts
 20 showing that there is a genuine issue for trial. Fed. R. Civ. P. 56(e). "A nonmovant must do more than
 21 merely raise some doubt as to the existence of a fact" and must set forth enough evidence to enable a
 22 jury to reasonably find for the nonmoving party. *Avia Group Int'l v. LA Gear California, Inc.*, 853 F.3d
 23 1557, 1560 (Fed. Cir. 1988); *Anderson v. Liberty Lobby, Inc.*, 477 U.S. at 249-50. When the
 24 nonmoving party fails to make a showing sufficient to establish evidence of an element essential to its
 25 case, the complete failure of proof concerning the essential element necessarily renders all other facts
 26 immaterial and a summary judgment is warranted. *Rotec Indus., Inc. v. Mitsubishi Corp.*, 215 F.3d
 27 1246, 1250 (Fed. Cir. 2000). Summary judgment is as appropriate in a patent case as it is in any other

1 case.” *C.R. Bard Inc. v. Advanced Cardiovascular Sys., Inc.*, 911 F.2d 670, 672 (Fed. Cir. 1990); *see*
 2 *also Desper Prods., Inc. v. Qsound Labs*, 157 F.3d 1325, 1332 (Fed. Cir. 1998).

3 A patent is not valid if the alleged invention claimed is not novel, or it would have been
 4 obvious to one of ordinary skill in the art. 35 U.S.C. § 101. A lack of novelty can be shown where the
 5 claim is anticipated, that is disclosed in a patent filed or a printed publication dated before the alleged
 6 invention. *Id.*, § 102(a) or if the invention was publicly known or on sale more than one year before
 7 the patent application was filed. *Id.*, § 102 (b). Finally, a patent claim is invalid if it was first invented
 8 in the U.S. by someone other than the patentee who did not abandon, suppress or conceal the
 9 invention. *Id.*, § 102(g). Anticipation requires a showing that a single prior art reference discloses,
 10 either expressly or inherently, each limitation of the claim. *In re Cruciferous Sprout Litigation*, 301
 11 F.3d 1343, 1349 (Fed. Cir. 2002).

12 **B. The Asserted Claims of the '872 and '094 Patents Are Invalid.**

13 1. Firoozmand's Patents Are Prior Art.

14 A patent claim is invalid if it was invented in this country first by someone other than the named
 15 inventor(s). 35 U.S.C. § 102(g). A patent claim is also invalid if it is described in an application for a
 16 patent filed by another before the patentee's invention. 35 U.S.C. § 102(e). The inventions disclosed
 17 in the Firoozmand patents are prior art to 3Com's patents. Presumptively, the first-filed application is
 18 prior art to a later application.

19 The person who is first to reduce to practice is *prima facie* the first inventor. *Mahurkar v. C.R.*
 20 *Bard, Inc.*, 79 F.3d 1572, 1577 (Fed. Cir. 1996). Mr. Firoozmand's invention at least constructively
 21 reduced to practice effective on the May 20, 1990 filing of his application, because filing a patent
 22 application is a constructive reduction to practice. *Hazeltine Corp. v. United States*, 820 F.2d 1190,
 23 1196 (Fed. Cir. 1987). Firoozmand therefore reduced his invention to practice no later than the May
 24 20, 1990. Because 3Com's presumptive date of invention is the July 28, 1992 filing date for its
 25 patents, Mr. Firoozmand's patents are prior art.

26 In order to avoid the Firoozmand prior art during prosecution of the '872 and '094 patents,
 27 3Com claimed that its inventors conceived of the claimed inventions before May 20, 1990. While the
 28 bare statements of the inventors, along with redacted documents, was sufficient for the PTO, to prevail

1 on that claim here, 3Com has the burden of coming forward with sufficient credible and corroborated
 2 evidence to support any claimed earlier date of conception. *C.R. Bard*, 79 F.3d at 1577. 3Com has not
 3 produced or pointed to any evidence to establish a date of conception before Mr. Firoozmand's filing.
 4 Because Mr. Firoozmand was the first to conceive and the first to reduce to practice, he is the first
 5 inventor under 35 U.S.C. §102(g). In addition, even if 3Com could somehow produce evidence to
 6 establish its date of conception before Mr. Firoozmand's, 3Com would then bear the burden of
 7 providing evidence to prove that its named inventors worked diligently to reduce the invention to
 8 practice. *C.R. Bard*, 79 F.3d at 1578. Such a showing requires proof that the inventors worked
 9 throughout the entire period from a date just prior to Firoozmand's reduction to practice until their
 10 own. *Monsanto Co. v. Mycogen Plant Science, Inc.*, 261 F.3d 1356, 1368-69 (Fed. Cir. 2001). 3Com
 11 cannot provide the required evidence to show either that it was the first to invent or, even if so, that its
 12 inventors were diligent.¹ As such, Mr. Firoozmand's prior invention, as described in his patents,
 13 constitutes prior art to the '459 patent.

14 2. The Firoozmand Patents Disclose Every Element of the '872 and '094 Patent
 15 Claims

16 As will be shown below, the network adapter design conceived of by Mr. Firoozmand,
 17 described in his patent and implemented in the SUPERNET 2 Chip Set included every element of the
 18 asserted claims of the '872 and '094 patent. The correspondence between that design and the patent
 19 claims is summarized below. In addition, detailed charts showing the presence of each claim limitation
 20 in this prior art are provided as Exhibits 5, 6 and 9 to Mr. Firoozmand's declaration and are
 21 incorporated herein by reference.

22 a) “buffer memory”

23 Claims 1, 10 and 21 of the '872 patent require a “buffer memory” for storing data transferred
 24 between the host and the network. '872 patent at 30:7-9; 31:12; 32:63-65; '094 patent at 28:32-32:45.

25
 26
 27 ¹ Should 3Com attempt to come forward with evidence to establish an earlier date of invention, this
 28 issue would become a dispute when each party conceived of the claimed invention under 35 U.S.C. § 102(g). Realtek reserves the right to establish a date of actual invention for Mr. Firoozmand earlier than his patent filing date.

1 Firoozmand I and II discloses the buffer memory as required in each of the '872 patent claims,
 2 Firoozmand Decl., ¶ 8.

3 b) “transferring data of frames to the buffer memory”

4 Claims 1, 10 and 21 require means or circuitry for transferring the data of frames from the host
 5 into the buffer memory. '872 patent at 30:10-11; 31:13-15; and 32:66-18. Claims 1, 9, 21, 28, 39 and
 6 42 of the '094 patent require the step of transferring data to, or receiving data into, a buffer memory.
 7 '094 patent at 28:32-32:45. Firoozmand I and II disclose circuitry means for transferring data of
 8 frames from the host to the buffer memory as required by the '872 patent claims. Firoozmand Decl.,
 9 ¶¶ 8-9, Exs. 6 and 7. Firoozmand I and II also discloses the operation of the buffer memory and
 10 related circuitry to perform the step of transferring data to or receiving data into the buffer as required
 11 by the claims of the '094 patent. *Id.*

12 c) “a threshold determination of an amount of data of the frame transferred
 13 to the buffer memory”

14 Claims 1, 10 and 21 each require means or logic coupled to the buffer memory that monitors
 15 the transfer of data to the buffer memory and to make a threshold determination of the amount of data
 16 transferred. '872 patent at 30:11:16; 31:16-21 and 33:1-5. Claim 10 further requires that the threshold
 17 value is stored in a host accessible alterable storage location. Firoozmand I and II disclose a host
 18 alterable storage location for a threshold value and a means for making the comparison of that value to
 19 the amount of data transferred to the buffer memory. Firoozmand Decl., ¶ 10, Exs. 6-7. Claims 9, 21,
 20 28, 39 and 42 of the '094 patent are method claims requiring the performance of the function required
 21 for the means or logic for monitoring the transfer of data set out in the '872 patent claims. '094 patent
 22 at 31:14-34:49. Firoozmand I and II disclose the operation of the necessary circuitry to perform these
 23 required steps. *Id.*

24 d) “initiating transmission of the frame prior to transfer of all of the data of
 25 the frame to the buffer memory”

26 Claims 1, 10 and 21 require means or logic responsive to the threshold determination for
 27 initiating the transfer of the frame prior to transfer of all of the data of the frame to the buffer memory
 28 from the host system. 30:17-21; 31:23-27; and 33:10-18. Firoozmand I and II disclose circuit means
 responsive to the threshold determination that begins the transfer of a frame data before all of the

1 frame data is received into the buffer memory from the host system. Firoozmand Decl., ¶¶ 8-9, Exs. 6
 2 and 7., Ex. 9. Claims 1, 9, 21, 28, 39 and 42 of the '094 patent are method claims with limitations that
 3 correspond to the apparatus limitations in the '872 patent. Firoozmand I and II disclose the operation
 4 of circuitry to perform the steps required to "initiate transmission of the frame" as required by each of
 5 these claims. *Id.*

6 e) "posting status information for use by the host system for optimizing the
 threshold value"

7 Claim 10 also requires a "control means . . . for posting status information for use by the host
 system for optimizing the threshold value." 31:34-17. Firoozmand Decl., ¶ 11, Exs. 6-7. Claims 21
 and 49 of the '094 patent require the step of "posting status information for use by the host system for
 optimizing the threshold value." 30:30-31; 32:55-56. Firoozmand I and II disclose circuitry necessary
 to perform this function and instruct one of skill in the art to carry out this step. *Id.*, ¶ 11, Exs. 6-7.

12 f) "underrun control logic which . . . supplies a bad frame signal"

13 Claim 1 also requires underrun control logic which . . . supplies a bad frame signal to the
 communication medium in response to the underrun condition." 30:26-31. Firoozmand I and II
 include the underrun control logic as required by claim 1. Firoozmand Decl., ¶ 12, Ex. ____.

14 g) CSMA/CD Network

15 Claim 21 of the '872 patent and claim 28 of the '094 patent are limited to a NIC for use in a
 carrier sense multiple access collision detection, or CSMA/CA network. In particular, claim 21
 requires a CSMA/CD medium access controller. '872 patent at 33:6-9. The SUPERNET 2 chipset was
 designed for a fiber distributed data interface, or FDDI, network and therefore does not anticipate
 claim 21. The Firoozmand patents, however, "are not so limited." Ex. 1 '749 patent at 6:63-68.
 Rather, the patent stresses that the intended application of the disclosed invention is "for passing data
 arranged at in frames through the buffer of a network adapter." FDDI is described as only "one
 utilization" of the invention. *Id.* 1:29-37. The claims also disclose that the invention applied to the
 transfer of frames through a network adapter generally. The first 31 claims are worded so broadly. It
 is not until claim 32 that the invention is expressed as limited to FDDI network adapters. Firoozmand
 Decl., Ex. 1 at 18-40-23:27; As such, the Firoozmand patents teach one of ordinary skill in the art that

1 the claimed early transmission invention could be used to improve the performance of any frame-based
 2 data network. CSMA/CD was a very broadly adopted and well-known frame-based network. As such,
 3 Firoozmand I and II discloses every element of claim 21. Firoozmand Decl., ¶ 13, Exs. 6 and 7. At a
 4 minimum, the Firoozmand patents combined with prior art CSMA/CD network adapters, suggest and
 5 motivate one of skill in the art to make the claimed invention. Firoozmand Decl., ¶ 13. Therefore
 6 these claims are obvious if not anticipated. *KSR Intern. Co. v. Teleflex, Inc.*, 550 U.S. ___, 127 S.Ct.
 7 1727, 1740 (2007) (“[I]f a technique has been used to improve one device, and a person of ordinary
 8 skill in the art would recognize that it would improve similar devices in the same way, using the
 9 technique is obvious unless its actual application is beyond his or her skill.”) As such, under either §
 10 102 or § 103, these claims are invalid.

11 3. The SUPERNET 2 Chipset Was On Sale More than One Year Before the '872
 12 and '094 Applications Were Filed.

13 A patent is invalid under 35 U.S.C. § 102(b) if, more than one year before the patent
 14 application is filed, the invention was 1) offered for sale in the United States and 2) the invention was
 15 reduced to practice or ready for patenting. *Pfaff*, 525 U.S. at 67. The first prong requires a showing of
 16 a commercial offer for sale. *Allen Eng'g Corp. v. Bartell Indus., Inc.*, 299 F.3d 1336, 1352 (Fed. Cir.
 17 2002). Whether there has been an offer is determined under general principles of commercial law. *Id.*

18 By February 1991 AMD publicly and widely announced the availability of the SUPERNET 2
 19 chipset, including the price at which it would sell that product. Firoozmand Decl., Ex. 7, Kim Decl.,
 20 Ex. B. For example, the February 1991 issue of “LAN: Local Area Network Magazine” included an
 21 article entitled “AMD Introduces FDDI Chip for Half-Size Cards.” That article describes the SuperNet
 22 2 chipset as including the FORMAC Plus media access controller chip, a physical layer controller chip
 23 and transmit and receive chips. *Id.* The article, which quotes AMD’s FDDI product marketing
 24 manager Basil Alwan at length, states that AMD is offering the chipset at a price of \$225.00 in lots of
 25 one thousand, that “commercial quantities” of the chips would be available by the end of March, 1991.
 26 *Id.* That same offer was repeated in June 1991 in AMD’s own magazine sent to its customers. Kim
 27 Decl., Ex. B (AMD00574). That article again states that the SUPERNET 2 was available at the price
 28 of \$225.00 when ordered in quantities of one thousand. These announcements constitute offers to sell

1 the SUPERNET 2 chipset. The include both price and quantity and thus are sufficiently detailed that
 2 an acceptance of these terms would bind AMD. As such, the first prong of the on-sale bar test is
 3 satisfied.

4 The second prong considers whether the item offered for sale is sufficiently definite that it
 5 could be described in a patent application. *Id.* That prong is obviously met here as the patent
 6 applications were filed, and the chips were fabricated and tested well before the offers for sale.

7 4. The SUPERNET 2 Chip Set Included Every Element of the '872 and '094
 8 Patent Claims

9 As will be shown below, the network adapter design conceived of by Mr. Firoozmand,
 10 described in his patent and implemented in the SUPERNET 2 Chip Set included every element of the
 11 claims 1 and 10 of the '872 and claims 1, 9, 21, 39 and 47 of the '094 patent. The correspondence
 12 between that design and the patent claims is summarized below. In addition, detailed charts showing
 13 the presence of each claim limitation in this prior art are provided as Exhibits 5, 6 and 9 to Mr.
 14 Firoozmand's declaration and are incorporated herein by reference.

15 a) “buffer memory”

16 Claims 1 and 10 of the '872 patent and claims 1, 9, 21, 39 and 42 of the '094 patent require a
 17 “buffer memory” for storing data transferred between the host and the network. '872 patent at 30:7-9;
 18 31:12; 32:63-65; '094 patent at 28:32-32:45. The Firoozmand patents, the Data Sheets and other
 19 articles confirm that the SUPERNET 2 chipset as offered for sale prior to July 1991 included the
 20 claimed buffer memory. *Id.* ¶ 17. *See also Id.*, Exs. 5,6,9 and 10.

21 b) “transferring data of frames to the buffer memory”

22 Claims 1 and 10 of the '872 patent require means or circuitry for transferring the data of frames
 23 from the host into the buffer memory. '872 patent at 30:10-11; 31:13-15; and 32:66-18. Claims 1, 9,
 24 21, 39 and 42 of the '094 patent require the step of transferring data to, or receiving data into, a buffer
 25 memory. '094 patent at 28:32-32:45. The Firoozmand patents, the Data Sheets and other articles
 26 confirm that the SUPERNET 2 chipset as offered for sale prior to July 1991 included the claimed
 27 circuitry for transferring data of frames to the buffer memory. *Id.*, ¶¶ 8-9, Exs. 11-12.

c) “a threshold determination of an amount of data of the frame transferred to the buffer memory”

Claims 1 and 10 of the '872 patent each require means or logic coupled to the buffer memory that monitors the transfer of data to the buffer memory and to make a threshold determination of the amount of data transferred. '872 patent at 30:11:16; 31:16-21 and 33:1-5. Claim 10 further requires that the threshold value is stored in a host accessible alterable storage location. Firoozmand I and II disclose a host alterable storage location for a threshold value and a means for making the comparison of that value to the amount of data transferred to the buffer memory. Firoozmand Decl., ¶ 10, Exs. 6-7. Claims 9, 21, 39 and 42 of the '094 patent are method claims requiring the performance of the function required for the means or logic for monitoring the transfer of data set out in the '872 patent claims. '094 patent at 31:14-34:49. The Firoozmand patents, the Data Sheets and other articles confirm that the SUPERNET 2 chipset as offered for sale prior to July 1991 included including circuitry and performed the step of making the threshold determination as required by of the asserted claims of the '872 and '094 patents. *Id.*

d) “initiating transmission of the frame prior to transfer of all of the data of the frame to the buffer memory”

Claims 1 and 10 of the ‘872 patent require means or logic responsive to the threshold determination for initiating the transfer of the frame prior to transfer of all of the data of the frame to the buffer memory from the host system. ’872 patent at 30:17-21; 31:23-27; and 33:10-18. Claims 1, 9, 21, 39 and 42 of the ‘094 patent require the step of initiating transmission before all of the frame data is received. ‘‘094 patent at 28:33-32:54. The Firoozmand patents, the Data Sheets and other articles confirm that the SUPERNET 2 chipset as offered for sale prior to July 1991 included circuitry that acted to initiate transmission of a frame prior to transfer of all of the data of the frame into the buffer memory. *Id.*, Exs. 11 and 12.

e) “posting status information for use by the host system for optimizing the threshold value”

Claim 10 of the '872 patent also requires a “control means . . . for posting status information for use by the host system for optimizing the threshold value.” 31:34-17. Firoozmand Decl., ¶ 11, Exs. 6-7. Claims 21 and 49 of the ‘094 patent require the step of “posting status information for use

1 by the host system for optimizing the threshold value.” 30:30-31; 32:55-56. The Firoozmand patents,
 2 the Data Sheets and other articles confirm that the SUPERNET 2 chipset as offered for sale prior to
 3 July 1991 included circuitry that performed the step of posting status information as required by the
 4 asserted claimed. *Id.*, Exs. 11 and 12.

5 f) “underrun control logic which . . . supplies a bad frame signal”

6 Claim 1 of the ‘872 patent also requires underrun control logic which . . . supplies a bad frame
 7 signal to the communication medium in response to the underrun condition.” ’872 patent at 30:26-31.
 8 Firoozmand patents, the Data Sheets and other articles confirm that the SUPERNET 2 chipset as
 9 offered for sale prior to July 1991 included the required underrun control logic. *Id.*, Exs. 11 and 12.

10 As set forth above, and as demonstrated in detail in the Firoozmand declaration and the claim
 11 charts attached as Exhibits 11 and 12 thereto, the SUPERNET 2 product included every element of
 12 asserted claims 1 and 10 of the ‘872 patent and claims 1, 9, 21, 39 and 47 of the ‘092 patent.

13 **IV. CONCLUSION**

14 For the reasons explained above, the Court should grant Realtek’s Motion for Summary
 15 Judgment that Claim 1 of the ‘872 patent is invalid.

16 Dated: November 16, 2007

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